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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/753,537	01/02/2001	David L. Multer	FUSN1-01003US0	1714

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EXAMINER	
ABEL JALIL, NEVEEN	

ART UNIT	PAPER NUMBER
2165	

DATE MAILED: 11/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/753,537	MULTER ET AL.	
	Examiner	Art Unit	
	Neveen Abel-Jalil	2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 September 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *80-90 and 109-116* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *80-90,and 109-116* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. In view of the Appeal Brief filed on September 19, 2006, PROSECUTION IS HEREBY REOPENED. *A new ground of rejection is* set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

2. Claims 80-90, and 109-116 are now pending.

Double Patenting

3. The Applicant has agreed to file a terminal disclaimer for Patents to US 6,694,336 and US 6,671,757 issued to Multer et al. as submitted in the Appeal Brief page footnotes. The Examiner kindly requests the filing of the Terminal Disclaimers in response to this office action.

4. The Double Patenting rejections against Multer et al.'s U.S. Patents No. 6,757,696 B2 and Patent No. 6,738,789 B2 and Patent No. 7,007,041 (corresponding to Patent application No. 09/753,643) are hereby withdrawn.

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 80-90, and 109-116 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-69 of Multer et al. U.S. Patent No. 6,694,336 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims are arguably broader than claim 1 of Multer et al.'336 which encompasses the same metes, bounds, and limitations.

Therefore, it would be obvious to eliminate the limitations of the narrower claims, since it has been held that omission of an element and its function and a combination where the remaining elements perform the same functions as before involves only routine skill in the art. See *In re Karlson*, 136 USPQ 184.

7. Claims 80-90, and 109-116 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-29 of Multer et al. U.S. Patent No. 6,671,757 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims are arguably broader than claim 24 of Multer et al.'757 which encompasses the same metes, bounds, and limitations. Therefore, it would be obvious to eliminate the limitations of the narrower claims, since it has been held that omission of an element and its function and a combination where the remaining elements perform the same functions as before involves only routine skill in the art. See *In re Karlson*, 136 USPQ 184.

Claim Objections

8. Claims 80, 82-84, 87, 90, and 109 are objected to because of the following informalities:

Claim 84, line 1 contains a typo behind the word "output" which appears to be numeral "1" and should be deleted. Appropriate correction is required.

Claims 80, 82, 83, 90, and 109 all recite the intended use "for" i.e. "for comparing" ... "for forwarding"...etc. Intended use recitations do not carry patentable weight since they never have to occur/happen. Claims should be amended to recite more firm and positive language (i.e. "to", "is", "that"). Appropriate correction is required

Claims 81, and 87, line 2, both recite, "operatively coupled" which is passive recitation of a capability of the system and no a functionality. Capabilities are optional and do not have to take place. The recitation should be amended to be more direct and functional such as "configured to" or simply to delete the "operatively".

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 80-88, and 90 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 80 recites the limitation "the personal computer" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 80 recites the limitation "the computer" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 87 recites the limitation "the second synchronizer" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Independent claim 80, line 7, recite "network coupled server", while dependent claim 81, line 2, introduces a new recitation of "server" by reciting "at least one storage server" therefore making it unclear whether the "network coupled server" is a different use "server" or in fact the one and the same as the "network server" in claim 80, if so, correction is required. If in fact they are different a distinction needs to be clarified in the claims as to what constitutes part of the synchronizer system sought to be claimed in the pre-amble of claim 80. The preamble states a "synchronizer... comprising" indicating the synchronizer contains "computer code" and "transaction generator" and its also coupled to a network server. However, claim 81 indicates that the synchronizer is actually coupled to a storage server. Is the language meant to indicate, "further coupling"? As in the synchronizer is coupled to both sets of servers? And do they both receive the difference transaction?

Claims 81, 87, and 88 recite the limitation "said difference transaction" in various lines. There is insufficient antecedent basis for this limitation in the claim. Is the reference being made to "said binary difference transaction"? If so, it should be stated as such in the claims for consistency.

Claims 82, 83, and 85, recite the limitation "said device" in various lines. There is insufficient antecedent basis for this limitation in the claim. Is the reference being made to "said other network coupled processing device"? If so, it should be stated as such in the claims for consistency.

Claim 83, line 2, recite, "updating the record" without any further indication to which record is being updated? There was never a prior mention of a record existing on the "other network coupled processing device"; instead the only reference made in preceding claims was stating the record as being stored on "personal computer" which is not considered to be one and the same as the "other network coupled processing device" (further emphasized by appellant's arguments in the brief page 11); thus, making the claimed recitation it vague and indefinite and lacking clear distinction.

Claim 87; initially recite a structure of how the synchronizer is coupled to a storage via a network. However, in the very last sentence, the claim shifts towards referencing a "second synchronizer" without any grammatical transition or any prior reference to the existence of "said second synchronizer". Correction is required.

Claim 90 recite "one file... includes Xdelta" which is vague and indefinite. There's no explanation or definition to how X i.e. the difference of yet the original difference (i.e. the delta) was achieved since there was no preceding mention of a "delta" file to start with. The only preceding reference was made with respect to "difference transaction" not a "delta file". There's no calculation or presentation of an "Xdelta" being

preformed. "Binary difference" is being interpreted to mean a "delta" between files. If the applicant intended to claim: "difference data for the delta file" as argued in the brief page 10; then the claims should be amended to recite such definition. Appropriate correction and clarification is required.

Claims 84-86 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Evidence that claims 84-86 fail(s) to correspond in scope with that which applicant(s) regard as the invention can be found in the brief filed 9/19/2006. In that paper, applicant has stated "first and second binary differencing engines" are separate entities, and this statement indicates that the invention is different from what is defined in the claim(s) because as Applicant's Figure 9b indicates that there are two synchronization servers 980, and 982 residing in a data center. They are two separate entities and not part of each other. In contrast, the preamble of claim 80 sates "A synchronizer... comprising" then dependent claims 84-86, recite "The synchronizer of claim 1, wherein the output is coupled to a second synchronizer" which is misleading in scope since one synchronizer can't possibly include another synchronizer server making the claim language confusing and hard to interpret and it also provides for misleading use of the word "network". The preamble of claim 80 should be amended to for example state a "synchronizer system" or the dependent claims should be amended to state that the "output of the first synchronizer is further coupled to a second synchronizer". Clarification is required.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. Claims 80-87, 90, and 109-116 are rejected under 35 U.S.C. 102(e) as being anticipated by Zondervan et al. (U.S. Patent No. 6,516,327 B1).

As to claim 80, Zondervan et al. discloses a synchronizer provided on a networked coupled processing device comprising:

computer code for comparing at least one file on the personal computer and a record of the file on the computer, and providing binary differencing data between the file and the record of the file (See column 3, lines 12-21); and

a transaction generator providing at least one binary difference transaction including said binary differencing data to an output for forwarding to a network coupled server, the server using the binary differencing data to synchronize at least one other network coupled processing device (See column 4, lines 21-45).

As to claim 81, Zondervan et al. discloses wherein the output is coupled to a network, and the synchronizer is operatively coupled to at least one storage server via the network, the storage server receiving said difference transaction from said synchronizer (See Figure 1, shows network, server, and devices, also see Figure 6A, and 6B).

As to claim 82, Zondervan et al. discloses wherein the synchronizer receives at least one binary difference transaction from the storage server, and further including computer code for applying the received difference transaction to the at least one file on the device (See Figure 8, 230).

As to claim 83, Zondervan et al. discloses wherein the synchronizer includes code for updating the record of the file on the device subsequent to applying the received difference transaction (See Figure 10, 276).

As to claim 84, Zondervan et al. discloses wherein the output is coupled to a second synchronizer and the binary difference transaction is provided to said second synchronizer (See Figure 1, shows network, server, and devices, also see Figure 6A, and 6B).

As to claim 85, Zondervan et al. discloses wherein the second synchronizer is on said device (See Figures 6A and 6B, wherein two different devices with two different synchronizers across a network).

As to claim 86, Zondervan et al. discloses wherein second synchronizer is coupled to a network, and the output of the transaction generator is coupled to the network and the second synchronizer (See Figure 1, shows network, server, and devices, also see Figure 6A, and 6B).

As to claim 87, Zondervan et al. discloses wherein the output is coupled to a network and the synchronizer is operatively coupled to at least one storage server via the network receiving said difference transaction from said synchronizer via the network and the second synchronizer is coupled to the storage server (See Figure 1, shows network, server, and devices, also see Figure 6A, and 6B).

As to claim 90, Zondervan et al. discloses wherein the computer code for comparing at least one file on the personal computer includes Xdelta (See column 12, lines 55-67).

As to claim 109, Zondervan et al. discloses a synchronizer provided on a network-coupled server, comprising:

computer code for comparing at least one file on a network coupled device in communication with the network coupled server and extracting binary differencing data representing the difference between the file and a record of the file (See column 13, lines 5-25); and

a transaction generator providing at least one transaction including said binary differencing data to an output of the network coupled server (See column 14, lines 29-52, wherein the output could be transmitted back the originating device on the network).

As to claim 110, Zondervan et al. discloses wherein the record of the file is provided on the network coupled device (See Figure 1, shows network, server, different devices connected, also see Figure 9, 252).

As to claim 111, Zondervan et al. discloses wherein the record of the file is provided on the network coupled server (See Figure 1, shows network, server, different devices connected, also see Figure 9, 252).

As to claim 112, Zondervan et al. discloses wherein the record of the file is a previous version in time of the file (See column 7, lines 20-31).

As to claim 113, Zondervan et al. discloses wherein the synchronizer further includes application code to modify a second version of the file by applying said binary differencing data to the second version of the file (See column 13, lines 5-25, wherein delta and second version is taught).

As to claim 114, Zondervan et al. discloses wherein the second version of the file is on a second network coupled device (See Figure 1, shows network, server, different devices connected, also see Figure 9, 252).

As to claim 115, Zondervan et al. discloses wherein the second version of the file is on the network coupled server (See Figure 1, also see column 12, lines 1-20).

As to claim 116, Zondervan et al. discloses a binary differencing synchronization system, comprising:

at least a first binary differencing engine coupled to a first network coupled device (See Figure 6A);

at least a second binary differencing engine coupled to a second network coupled device (See Figure 6B); and

a storage device coupled to the first and the second network coupled devices storing binary differencing data from and outputting binary differencing data to said at least first and second binary differencing engines (See Figure 1, shows network, server, different devices connected, also see Figure 9, 252, also column 9, lines 51-63).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

14. Claim 88 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zondervan et al. (U.S. Patent No. 6,516,327 B1) in view of Lappington et al. (U.S. Patent No. 5,519,433).

As to claim 88, Zondervan et al. does not teach wherein the synchronizer further includes an encryption routine encrypting the difference transaction.

Lappington et al. teaches wherein the synchronizer further includes an encryption routine encrypting the difference transaction (See Lappington et al. column 29, lines 25-31).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Zondervan et al. with the teachings of Lappington et al. to include the synchronizer further includes an encryption routine encrypting the difference transaction because it provides for security and authentication.

15. Claim 89 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zondervan et al. (U.S. Patent No. 6,516,327 B1) in view of Morris (U.S. Patent No. 5,574,906) –Cited in previous office action.

As to claim 89, Zondervan et al. does not teach wherein the synchronizer further includes a compression routine.

Morris teaches wherein the synchronizer further includes a compression routine (See Morris column 6, lines 56-62, also see Morris column 11, lines 33-51).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Zondervan et al. with the teachings of Morris to include the synchronizer further includes a compression routine because it provides for reduced storage space and faster transmission of data.

Response to Arguments

16. Applicant's arguments with respect to claims 80-90 and 109-116 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wong et al. (U.S. Patent No. 6,654,746 B1) teaches workgroup file synchronization.

Benjamin C. Reed, et al. Authenticating Network-Attached Storage. IEEE Jan.-Feb. 2000.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neveen Abel-Jalil whose telephone number is 571-272-4074. The examiner can normally be reached on 8:30AM-5: 30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Neveen Abel-Jalil
November 22, 2006